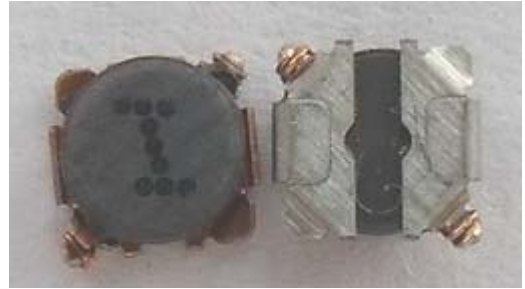


## SMD Power Inductor(MPIL Series) 贴片功率电感 MPIL 系列

### FEATURES 特点

- low profile, low RDC, high current handling capacities  
小尺寸、低直流电阻、高电流
- Magnetically shielded structure that ensures the high-density mounting configurations.  
高密度封装的磁屏蔽结构
- Flat bottom surface ensures secure, reliable mounting.  
平坦焊面便于安装
- Provided in embossed carrier tape packaging for use with automatic mounting machines. 编带包装便于自动贴装



### APPLICATIONS 应用

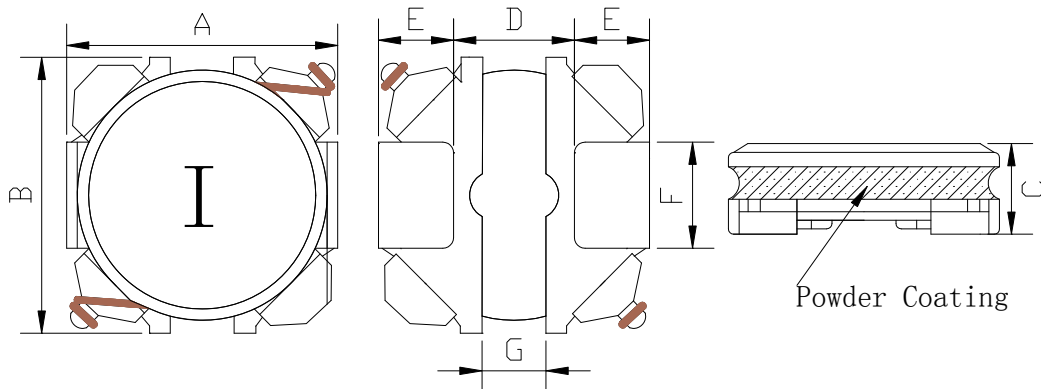
- Ideally used in Portable telephones, , PDA, DSC, DC-DC Converters, etc.  
用于手机、掌上电脑、数字信号控制器, DC-DC 转换等。

### Product Identification 产品标识

MPIL    3015   -   3R3    M    LF  
①            ②            ③            ④            ⑤

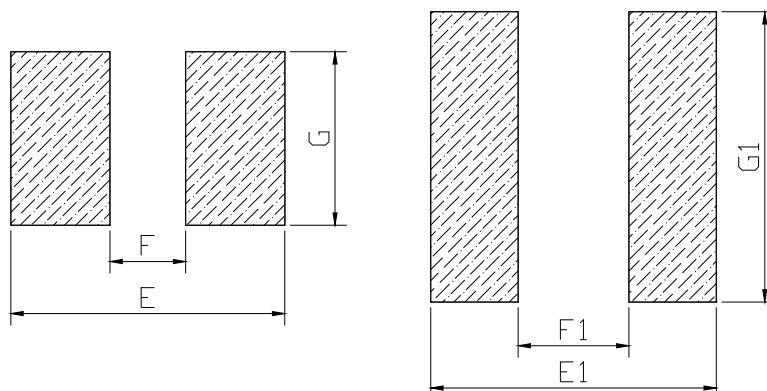
- ① Series name 系列名称
- ② Product dimensions 产品尺寸: (3015=3.0\*2.9\*1.5 mm )
- ③ Inductance Value 电感量: (R68=0.68uH 3R3=3.3uH 100=10uH)
- ④ Inductance Tolerance 电感量公差: ( M:20% ; N:30%)
- ⑤ Lead free products 无铅产品

### Shapes And Dimensions 外形及尺寸示意图



| Series   | Dimensions(mm) |         |        |        |        |        |        |
|----------|----------------|---------|--------|--------|--------|--------|--------|
|          | A              | B       | C Max. | D Ref. | E Ref. | F Ref. | G Ref. |
| MPIL3010 | 3.0±0.2        | 2.9±0.2 | 1.0    | 1.5    | 0.76   | 1.2    | 0.7    |
| MPIL3015 | 3.0±0.2        | 2.9±0.2 | 1.5    | 1.5    | 0.76   | 1.2    | 0.7    |

Recommended Footprint 焊位示意图



| Series        | Dimensions(mm) |         |        |         |        |         |
|---------------|----------------|---------|--------|---------|--------|---------|
|               | E ref.         | E1 ref. | F ref. | F1 ref. | G ref. | G1 ref. |
| MPIL30 Series | 3.4            | 3.2     | 1.4    | 0.6     | 1.6    | 3.3     |

Electrical Characteristics 电气性能

MPIL3010 Series

| Part Number       | L<br>(uH) | Tolerance<br>(±%) | Rdc<br>±20%(mΩ) | Idc<br>Typ. (mA) |         | Marking |
|-------------------|-----------|-------------------|-----------------|------------------|---------|---------|
|                   |           |                   |                 | L ↓ 30%          | T ↑ 40℃ |         |
| MPIL3010-1R0 □-LF | 1.00      | 30                | 64              | 1500             | 1700    | A       |
| MPIL3010-1R2 □-LF | 1.20      | 30                | 72              | 1300             | 1600    | B       |
| MPIL3010-1R5 □-LF | 1.50      | 30                | 86              | 1100             | 1450    | C       |
| MPIL3010-2R2 □-LF | 2.20      | 30                | 120             | 950              | 1250    | E       |
| MPIL3010-3R3 □-LF | 3.30      | 30                | 170             | 800              | 1000    | G       |
| MPIL3010-3R9 □-LF | 3.90      | 30                | 200             | 700              | 900     | H       |
| MPIL3010-4R7 □-LF | 4.70      | 20                | 250             | 650              | 850     | I       |
| MPIL3010-5R6 □-LF | 5.60      | 20                | 300             | 600              | 780     | J       |
| MPIL3010-6R8 □-LF | 6.80      | 20                | 350             | 550              | 700     | K       |
| MPIL3010-8R2 □-LF | 8.20      | 20                | 400             | 500              | 650     | L       |
| MPIL3010-100 □-LF | 10.0      | 20                | 490             | 450              | 600     | M       |
| MPIL3010-150 □-LF | 15.0      | 20                | 680             | 380              | 500     | O       |
| MPIL3010-220 □-LF | 22.0      | 20                | 1000            | 330              | 400     | Q       |

## SMD Power Inductor(MPIL Series) 贴片功率电感 MPIL 系列

### Electrical Characteristics 电气性能

#### MPIL3015Series

| Part Number       | L<br>(uH) | Tolerance<br>(±%) | Rdc<br>±20%(mΩ) | Idc<br>Typ. (mA) |         | Marking |
|-------------------|-----------|-------------------|-----------------|------------------|---------|---------|
|                   |           |                   |                 | L ↓ 30%          | T ↑ 40℃ |         |
| MPIL3015-R68 □-LF | 0.68      | 30                | 38              | 3400             | 2000    | 8       |
| MPIL3015-1R0 □-LF | 1.00      | 30                | 44              | 3000             | 1850    | A       |
| MPIL3015-1R2 □-LF | 1.20      | 30                | 55              | 2500             | 1700    | B       |
| MPIL3015-1R5 □-LF | 1.50      | 30                | 71              | 2200             | 1550    | C       |
| MPIL3015-1R8 □-LF | 1.80      | 30                | 79              | 2000             | 1450    | D       |
| MPIL3015-2R2 □-LF | 2.20      | 20                | 99              | 1900             | 1350    | E       |
| MPIL3015-2R7 □-LF | 2.70      | 20                | 110             | 1700             | 1300    | F       |
| MPIL3015-3R3 □-LF | 3.30      | 20                | 120             | 1600             | 1250    | G       |
| MPIL3015-4R7 □-LF | 4.70      | 20                | 180             | 1300             | 1050    | I       |
| MPIL3015-5R6 □-LF | 5.60      | 20                | 200             | 1200             | 1000    | J       |
| MPIL3015-6R8 □-LF | 6.80      | 20                | 220             | 1100             | 950     | K       |
| MPIL3015-100 □-LF | 10.0      | 20                | 330             | 950              | 750     | M       |
| MPIL3015-150 □-LF | 15.0      | 20                | 540             | 700              | 600     | O       |
| MPIL3015-220 □-LF | 22.0      | 20                | 780             | 650              | 420     | Q       |
| MPIL3015-470 □-LF | 47.0      | 20                | 1680            | 400              | 260     | U       |

1. L , Idc: Agilent/HP 4284A , 100KHz with 0.1V.
3. Rdc : DIGITAL MILLIOHM METER Chroma 16502, or equivalent.
4. IDC1: Based on inductance change ( $\Delta L/L_0$ :  $\leq -30\%$ ) @ ambient temp. 25℃  
IDC2: Based on temperature rise ( $\Delta T$ : 40℃ TYP.)
5. Operating temperature range from -25℃ to 85℃.